

# Wickes



## **HOW TO INSULATE YOUR HOME**

A vast amount of expensive heat escapes from your home through the loft, walls, windows and doors. The Energy Saving Trust estimates that over a quarter (26%) of a home's heat loss is through the roof, a third (33%) is through the walls and 20% is through poor ventilation and draughts.

Make sure you winter-proof your home with Wickes insulation products and keep the heat in. Insulation is available at Wickes for new cavity walls, lofts, floors, doors and

Insulating your home to the latest requirements is a one-off cost, which will allow you to save money on your energy bills year after year without any further investment. You can also install and forget about insulation as it does not need any on going maintenance.

All houses for sale or rent in England and Wales now have to have an Energy Performance Certificate, which also suggests areas for improvement. If you are buying or selling a home you now need a certificate by law. The certificate provides 'A' to 'G' ratings for the building, with 'A' being the most energy efficient and 'G' being the least.

Insulation is a crucial part of of any property and will become a more important part of compliance under the Government's Code for Sustainable Homes. (source: **Energy Saving Trust 2009 and Directgov)** 

Achieve a cooler house in the summer: a common myth is that insulation makes your house warmer in the summer. In fact insulation works by slowing heat transfer meaning that it keeps the warmth in during winter, but will keep your house cooler in summer.

Simply put; good insulation is about keeping more money in your pocket or purse. Every little bit of heat you lose from your home is costing you money, a little here and a little there adds up to a lot over a day, even more in a week, so how much extra are you paying in a month?

Remember that we heat our houses for about six to seven months a year. If your home is not properly insulated, with today's higher energy prices, the amount of money you have wasted could take you on a nice holiday or pay for a good part of a new kitchen - you do the sums.

This Good Idea Leaflet details some top tips on how to insulate your home, which will allow you to save energy and money. The first and no cost option if you can't afford the latest double-glazed windows, is simply to close the curtains and make sure they are not over the front of any radiator when it is on.



#### **KEEP INFORMED**

- · Look for other Good Idea Leaflets that could help you with your current project.
- Check that your Good Idea Leaflets are kept up to date. Leaflets are regularly changed to reflect product changes so keep an eye on issue dates.
- If you would like to be put on our mailing list for the Wickes Catalogue, call our Freephone number which is:

#### 0500 300 328

Visit our website at www. wickes.co.uk

#### **LOFT INSULATION**

#### **INSULATING YOUR LOFT**

When it comes to insulating your loft you have two options:

- 1) Insulate the loft at ceiling level
- 2) Insulate the loft at rafter level

#### Option 1: Insulating the loft at ceiling level

By insulating the loft at ceiling level, you are creating a cold roof space meaning that your loft will be fine for storage but will not be habitable. Wickes Loft Roll (100mm between the joists and 170mm or 200mm over the joists) can be used for this purpose (161-210, 161-209, 161-279).

#### Option 2: Insulating the loft at rafter level

If you are converting your loft into a habitable space, you will need to insulate between the rafters. The loft space can then be converted into a useful space such as a bedroom or study. The depth of the rafters may need to be extended to ensure adequate levels of insulation can be installed, this is discussed in more detail later.

#### **BEFORE YOU START**

#### Loft suitability

There should be sufficient ventilation in the loft to allow air movement. There must not be evidence of condensation, mustiness, wet or dry rot or mould growth within the loft space. If adequate ventilation is overlooked it can lead to severe condensation problems – and to rotting timbers. Vents can be added where necessary.

- The roof must be watertight with no obvious rainwater penetration or evidence of
- The ceilings must be capable of supporting the weight of the insulation and loads imposed during installation.
- There must be no obvious defects in the electrical wiring in the roof space.
- There must be no obvious corrosion of the structural metal connections in the roof structural members.



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- There must be no evidence of leakage from existing water supply pipes or tank(s).
- Where insulation has been, or is pushed into the eaves and is stopping necessary ventilation; this must be removed.
- In the unlikely event of asbestos in the roof space i.e. pipe/tank and flue insulation, professional advice must be sought.

#### **Boarded Loft Options:**

- Remove storage boards altogether and lay Wickes 100mm Loft Roll (161-210) between joists.
- Lay Space Board Insulation (161-280) across joists in the designated storage area. Each board should be supported by 3 joists.
- Lay Chipboard Loft Panels (116-240) on top of the Space Board and secure into the ceiling joists with screws.
- Lay 170mm or 200mm Wickes Loft Roll (161-209, 161-279) over the joists around the storage area.
- NOTE: Only lift boards if this will not cause damage.
- If temporary space is required and you don't wish to raise joists, lay 100mm insulation between joists and refit boards. Then, lay at least 170mm on top. Roll back insulation only where space is needed and recover when not in use.
- Push insulation under any nonmoveable boards to seal joist tunnels and lay 170mm on top of boards.

**NOTE:** Where items are stored on top of exposed insulation or there are any uncovered areas, this will reduce thermal efficiency.

#### Fire Safety:

You must:

- · Keep insulation clear of recessed lights
- Keep electrical cables above the insulation.
- · Keep insulation clear of flues.

#### **INSULATING A COLD ROOF SPACE**

#### • Building Regulation Requirements

In order to comply with the thermal requirements of the Building Regulations, a 270mm thickness of insulation is required in loft spaces of new dwellings. This can be achieved through installing a combination of 100mm and 170mm thick loft roll insulation which will achieve a U-value of 0.16W/m²K.

#### Recommendation

The thermal part of the Building Regulations applies to both new build properties and extensions to existing properties. Wickes recommend that you also install at least 270mm of insulation in the loft of an existing property. Thicker insulation equals bigger energy savings which equals lower energy bills.

#### Safety Instructions

Safety Wear. When working in confined spaces a suitable face mask which bears the 'CE' mark should be used. In applications such as lofts etc, a properly fitted disposable facemask to EN 149 (type FFP1 or FFP2) is adequate. When handling, wear gloves. Should skin irritation be experienced, it may be lessened by rinsing under cold running water before washing.

**Crawling Boards.** You should also use suitable crawling boards spanning at least four joists when working in the loft.

**Electrics.** Insulation must not be laid over electric cables. Carefully, lift electric cables above the insulation so that they do not overheat. Ensure there are no loose or disconnected wires and re-route them if necessary. Insulation should be kept at least 75mm away from recessed light fittings and hot flues to prevent them overheating.

#### • Calculating Requirements

To calculate how many rolls you need, measure the length and width of the loft. Multiply the length by the width to determine the area. Deduct approximately 10% from the calculated area when installing the base layer of insulation between the joists. Divide the area by the loft roll pack coverage to get the number of rolls required.

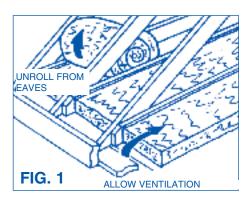
## STEPS TO INSTALLING LOFT INSULATION

- 1. Measure the space between the joists. Joists tend to be either at 400mm or 600mm centres. Wickes 100mm or 170mm loft roll insulation is suitable for both joist centres.
- 2. Clear the loft. Remove all objects from the loft and then lift the loft boards (if any are present). You will need to fit insulation between the ceiling joists.
- 3. Install 100mm loft roll between the joists. Most lofts have ceiling joists which are 100mm high, so if you have loft insulation between the joists already, there is no need to replace it but you may still need to top it up.

When using Wickes 100mm Base Layer Loft Roll Insulation between the joists, look for the dotted lines on the packaging indicating approximate 400mm and 600mm cutting marks. Cut carefully through the plastic packaging at the appropriate 400mm points (two equally spaced cuts) or at the 600mm mid-point (one central cut). For 400mm

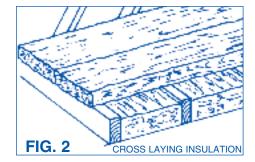
widths, break the roll into three using firm pressure either side of the cut marks. For 600mm widths, break the roll into two at the central cut point.

Start from the eaves ensuring the wall plate is covered and work towards the centre of the loft, placing loft insulation between the joists (on top of any existing insulation in place. FIG.1). Ensure insulation depth is equal to the depth of the joists. Cut to length with a knife and butt joint where necessary. When space along joists is filled, cut the roll to length. The roll offcuts can be used elsewhere between the joists.



4. Overlay with a thicker loft roll. (FIG.2) It is important to cross-lay the 100mm insulation between the joists with a top layer to retain as much heat as possible. This prevents 'cold bridging' whereby heat escapes through the ceiling joists. Ensure the loft area is completely covered except directly under the water tank (unless the water tank is elevated).

Wickes 150mm or 170mm top layer loft roll insulation is suitable for use as a top up layer.



- 5. Insulate the loft hatch. Where possible insulate the loft hatch by using appropriate draught seals and fixing polystyrene or Wickes General Purpose Insulation Slab to the inside of the hatch. Insulation should be fixed in position using dabs of adhesive and mechanical fixings.
- 6. Insulate the cold water tank and pipes. Use a Wickes cold water tank jacket and Wickes Water Byelaw pipe lagging to protect the water from freezing.

**NOTE:** Once insulation has been installed, a permanently fixed raised

walkway will prevent the insulation from being compressed and losing thermal performance. If this is not possible, ensure planks are placed on top of insulation when working in the loft space.

#### **WICKES LOFT ROLL INSULATION**

Wickes loft roll products have excellent thermal properties and also provide high levels of acoustic performance. The performance of Wickes loft roll insulation will not deteriorate over time. Loft rolls are made from glass mineral wool which is manufactured from approximately 50% recycled bottles.

150mm Space Blanket (161-206) is ideal for people who are looking for a quick, clean, virtually itch-free job. It has a polyethylene film covering which makes it easy to handle and more comfortable to install.

It is suitable for use as a top layer to Wickes 100mm Base Layer Loft Roll.

#### **INSULATING A WARM ROOF SPACE**

#### Building Regulation Requirements

If you are converting your loft into a habitable space, you must comply with **Building Regulations Approved Document** L1B. This states that existing dwellings must meet "elemental U-values". These are target figures for individual elements such as floors, walls and roofs. When converting a loft, you must achieve a U-value for the roof of 0.18 W/m2K. Remember that a loft conversion requires Building Regulations approval.

#### Suitable Products

Wickes General Purpose Insulation Slab 50mm (161-199) (and 100mm (161-236) in selected stores) is a flexible, frictionfit, rock mineral wool slab with excellent acoustic, thermal and fire properties.

- Friction fits between rafters
- Provides excellent thermal and acoustic performance
- Versatile multi-purpose product
- A flexible edge on all 4 sides total flexibility and ease of installation

#### **Thermal Conductivity:**

0.037 W/mK.

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#### **Fire Performance**

Classified as Euroclass A1 to BS EN ISO 13501-1

To meet Building Regulation requirements and acoustic requirements (as defined in Robust Details), a total thickness of 200mm General Purpose slab is required.

As well as being used between roof

rafters, General Purpose Insulation Slab is suitable for the following applications:

- Separating walls
- Partition walls
- Internal floors
- Internal linings
- Light steel frame walls (external new build)
- Suspended timber floors

#### Safety Instructions

Safety Wear. When working in confined spaces a suitable face mask which bears the 'CE' mark should be used. In applications such as lofts etc, a properly fitted disposable facemask to EN 149 (type FFP1 or FFP2) is adequate. When handling, wear gloves. Should skin irritation be experienced, it may be lessened by rinsing under cold running water before washing.

#### **Steps to installing General Purpose Insulation Slabs at Rafter Level**

- 1. General Purpose Slab can be installed in layers in order to achieve a total thickness of 200mm to meet Building Regulations.
- 2. A 50mm ventilated airspace must be maintained between the slab and underside of the existing roofing felt, boarding or slates in order to maintain adequate ventilation and reduce the risk of condensation forming. (FIG. 3)



- 3. In order to achieve a rafter depth which will allow for a 50mm void and 200mm of General Purpose Slab, timber battens may need to be screwed to rafters to increase the rafter depth.
- 4. Once the required rafter depth is achieved, friction fit cut slabs between each rafter. No fixings are required. If required, slabs can be cut using an ordinary kitchen knife. Ensure you cut the slabs slightly oversize to allow for a tight, friction fit.
- 5. Start work on one side of the roof slope, installing the first length into place between adjacent rafters just beneath the ridge board.
- 6. Continue installing more slabs, working downwards until you reach the eaves level. Cut the last slab so that it finishes level with the top of the wall plate.
- 7. Work across the roof slope, filling each

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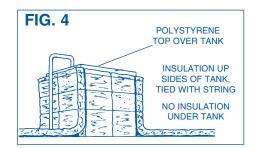
#### **INSULATING WATER STORAGE TANKS**

#### **Cold Water Tank**

If you have insulated the floor of your loft, it will be a much colder area and the risk of water in tanks and pipes freezing during the winter months is increased. To prevent freezing:

- 1. Do not insulate the area directly underneath the cold water storage tank and central heating header tank (if you have one). This will allow some heat from the house to travel through the loft floor and help prevent freezing.
- 2. Insulate your cold water storage tank using a Wickes Cold Water Tank Jacket (210-204, 210-205).

Alternatively, for larger tanks, place a polystyrene sheet on the top of the tank and run the loft insulation up the sides and tie in place using string. Ensure there are no gaps. (FIG. 4)



Another effective means of insulating a larger tank would be to form a box around the tank using 25mm polystyrene sheet. The side panels of the box should extend beyond the tank right down to floor level with cut outs for tank outlets and inlet pipes. Seal any gaps.

#### **Hot Water Tank**

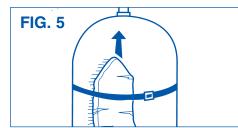
Modern hot water storage cylinders have integral insulation, but older copper cylinders aren't insulated, meaning an enormous amount of heat escapes. To keep the heat in, use a Wickes British Standard Hot Water Cylinder Jacket (210-

#### Safety Instructions

Ensure that cables, especially those leading to an immersion heater boss, do not become trapped under the jacket.

#### Steps to fitting a Hot Water Tank **Jacket**

1. Unwrap the rolled-up compressed segments and allow them to expand to their full thickness.



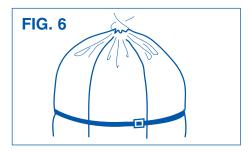
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- 2. Loosely tie one of the straps provided around the cylinder just below the curved top.
- 3. Slip the shaped top of one segment under the strap, loosening it slightly.
- 4. Ease the segment up so that it reaches the top of the tank. (FIG. 5)
- 5. Repeat with the other segments until all are roughly in position. Position segments neatly around the jacket about 300mm apart. Do not tighten straps too much so as to avoid compressing the jacket.
- 6. Gather the tops of all segments together. Thread the cord provided through the eyelets and tie around the hot



water outlet pipe at the top of the tank. (FIG. 6)

#### **Insulating Pipes**

To prevent pipes freezing in an insulated loft, it is essential to fit adequate pipe insulation. Fitting pipe insulation properly is cheap and will prevent pipes from bursting.

#### Suitable Products

Wickes recommends the use of Water Byelaw pipe lagging. This meets current requirements of the Water Byelaws and offers high levels of insulation more suited to modern standards of loft insulation.

Alternatively, Wickes Economy pipe lagging or Felt Pipe Lagging can be used.

## Fitting Wickes Water Byelaw & Economy Pipe Lagging

- 1. Open the split along the length of the lagging and slip over the pipe.
- 2. The split will re-close around the pipe. To secure, use tape.
- 3. Fasten lengths of pipe lagging together using tape.
- 4. The lagging is flexible but may open up around tight bends. Use tape to keep the split closed. Alternatively, the lagging can

be cut with mitred ends and fitted over 90 degree joints.

5. At tees the lagging will need to be cut and then taped together.

#### **Wickes Felt Pipe Lagging**

Wickes Felt Pipe Lagging is suitable for 15mm or 22mm pipes.

The lagging is simply wrapped around pipes or can be slipped over the pipe lengths in new installations before connections are made.

#### **PREVENTING DRAUGHTS**

Gaps around windows and doors account for approximately 20% of heat lost (Energy Saving Trust). These gaps can be sealed using products from the Wickes range of draught excluders.

These products will control the flow of air into your home; reducing draughts and improving comfort levels.

Draught excluders are available for a wide range of applications:

Around the door
Letterbox
Secondary glazing
Around the window
Garage doors

#### **WALL INSULATION**

#### **INSULATING A CAVITY WALL**

A third of heat loss in the home is through the walls of the house. If you have existing cavity walls, Wickes would recommend that you get blown-insulation installed. If you are building an extension, you also need to consider wall insulation.

#### • Building Regulations

Document L1B of the Building Regulations requires the walls of a house extension to meet a U-value of 0.28 W/m<sup>2</sup>K. Walls incorporating Wickes 100mm Cavity Wall Slab can meet this requirement.

#### Suitable Product

Wickes 100mm Cavity (161-235) Wall Slab Insulation is semi-rigid slabs of non-combustible, glass mineral wool, which provide a full or part-fill cavity solution. The slabs are 455mm wide to suit standard vertical wall tie spacings, ensuring a closed joint with adjacent slabs.

#### Excellent thermal and fire performance

- Water repellent
- Slabs 'knit' together, thus eliminating air gaps between adjacent slabs
- Approved for use in buildings up to 12m high in any exposure zone and for use in multi-storey applications up to 25m in height.

#### Thermal Conductivity:

0.037 W/mK.

#### **Fire Performance:**

Classified as Euroclass A1 to BS EN ISO 13501-1

#### Steps to installing Wickes 100mm Cavity Wall Slab as a partial fill solution (using wall ties acceptable for insulation retention and structural stability)

- 1. Build a section of the leading leaf with the first row of wall ties, at approximately 600mm horizontal spacing, where the insulation is to begin. The first run of slabs may commence below damp-proof course level to provide some edge insulation for the floor.
- 2. Build up the leading leaf to a minimum height of 675mm, with a second row of wall ties at 450mm vertical spacing. All wall ties must slope downwards towards the outer leaf. The slabs are then compressed slightly between the upper and lower wall ties, behind the retaining discs / clips or wheels to form a butt-jointed run.
- 3. Horizontal spacing of wall ties should be 450mm or 600mm depending on the thickness of the thinner leaf, where insulation retaining ties / clips are sufficient for structural purposes. Where additional vertical twist ties are required, insulation retaining ties / clips should have 600mm spacings whilst additional vertical twist ties should have 900mm centres.

- 4. Build the other leaf up to the level of the top of the slabs.
- 5. Install Wickes 100mm Cavity Wall Slab as the wall is built up to the required height.

#### Steps to installing Wickes 100mm Cavity Wall Insulation Slab as a full fill solution

- 1. Walls should be constructed in the normal manner, with the first row of wall ties where the insulation is to begin, but not on the damp-proof course, and at approximately 600mm horizontal spacing. The first run of slabs may commence below damp-proof course level to provide some edge insulation for the floor.
- 2. Build up a section of wall leaf to a course above the next row of wall ties placed at 450mm vertical spacing and not more than 900mm horizontal spacing.
- 3. Place the slabs between the upper and lower wall ties to form a closely buttjointed run.
- 4. Insert the drip on each of the upper wall ties into the top and middle of the slabs.
- 5. Build the other leaf up to the same level as the slabs with its inner face in contact with the slabs.
- 6. Install Wickes 100mm Cavity Wall Slab as the wall is built up to the required height.
- 7. After each section of the wall leaf is built, remove mortar droppings from the exposed edges of the insulation or protect the slabs with a timber batten.
- 8. Slabs can be cut with a sharp knife



to fit features such as windows, doors, apertures and air bricks. Cut pieces should completely fill spaces and no gaps should be left in the insulation.

#### **INSULATING A PARTITION WALL**

#### Building Regulations

In England and Wales, the 2003 edition of Approved Document E introduced a requirement for sound insulation of internal walls within flats and houses. Internal walls between a bedroom or room with a WC and another room, are required to have a minimum sound insulation performance of 40RwdB.

This requirement applies to new internal walls in dwellings formed by a 'Material Change of Use' and new build extensions to existing dwellings.

#### • Suitable Product

Wickes General Purpose Insulation Slab 50mm (and 100mm in selected stores), is a flexible, friction-fit, rock mineral wool slab with excellent acoustic, thermal and fire properties.

## Steps to installing General Purpose Insulation Slab in a timber stud partition wall

A layer of 50mm General Purpose Slab with 12.5mm plasterboard either side will meet the requirements of Approved Document E.

- Construct the timber frame, applying a bead of sealant to each piece of timber which is to be fixed to the surrounding structure.
- 2. Board out one side of the partition and

then friction-fit the insulation between the studs. Ensure the insulation fits tightly against the stud sides and is in contact with the plasterboard sheet.

3. Board out the second side, seal all gaps around the perimeter of the plasterboard with sealant.

## Steps to installing General Purpose Slab in a metal C-stud partition wall

- 1. Construct the steel frame, applying a bead of acoustic sealant to the back of the studs to be fixed to the surrounding structure.
- 2. Board out one side of the partition and then friction-fit the insulation. The insulation will friction fit into position between studs at 600mm centres.
- 3. Board out the second side and finish using standard dry lining techniques.

#### **FLOOR INSULATION**

#### **INSULATING A GROUND FLOOR**

#### · Building Regulations

When under the auspices of Building Control, the Building Regulations L1A (new build) and L1B (extension / renovation) apply to floors.

These floors are required to achieve a minimum Thermal Transmittance (heat loss) value, called a U-value. The U-value for floors in new builds is 0.25 W/m²K, for extensions it is 0.22 W/m²K.

The U-value for a ground floor is based upon the ratio of the exposed floor perimeter to the floor area, known as the P/A ratio. The P/A ratio is combined with the floor build up and calculated in accordance with the BS EN 13370 methodology to produce a U-value unique to each individual floor.

The lower the P/A ratio, the less insulation will be required to achieve a particular U-value. The more insulation installed, the lower the U-value will be.

#### Suitable Product

Wickes Polystyrene Sheet can be used above or below the damp-proof membrane.

- High levels of thermal performance are maintained for the life of the building.
- Installation is simple, requiring no specialist trades or equipment.
- Lightweight material which is easy to handle.

#### Steps to installing Wickes Polystyrene Sheet below ground-supported slab

1. Wickes Polystyrene Sheet is not a

damp-proof membrane (DPM). A suitable DPM should be installed either above or below the Polystyrene Sheet, or on top of the concrete slab. Liquid membranes are positioned above the slab. If a liquid DPM is used, care should be taken that it is compatible with Wickes Polystyrene Sheet and that it is completely dry before the insulation is laid.

- 2. Wickes Polystyrene Sheet should be loose-laid over the prepared surface; all joints should be tightly butted. If the concrete slab is to be poured directly onto the Wickes Polystyrene Sheet, the joints should be covered with 75mm-wide masking tape to prevent ingress of concrete or grout between the boards.
- 3. Vertical upstands of polystyrene should be used around the perimeter to prevent cold bridging.
- 4. Lay the concrete slab to the required thickness and tamp or power-float to achieve the required finish. During these operations, the surface of Wickes Polystyrene Sheet or the DPM should be protected from impact damage or excessive trafficking by using spreader boards. Protect the insulation and membrane upstands using timber boards.

#### Steps to installing Wickes Polystyrene Sheet below screed finish

1. Ensure the concrete slab has a level, evenly-tamped surface; a floated or screed finish is not necessary. Leave the slab as long as possible to dry out.

2. Wickes Polystyrene Sheet is not a damp-proof membrane. A suitable DPM should be installed either above or below the Polystyrene Sheet, or on top of the concrete slab. Liquid membranes are positioned above the slab. If a liquid DPM is used, care should be taken that

Sheet and that it is completely dry before the insulation is laid.

- 3. Providing the work is carried out in accordance with the relevant Byelaws or Regulations, electrical conduits, gas and water pipes can be accommodated within the thickness of the concrete slab. If this is not possible, services can be accommodated within the thickness of the insulation providing pipes etc, are securely fixed to the slab. Wickes Polystyrene Sheet must not come into direct contact with PVC-sheathed cable, nor closer than 12mm to hot water pipes.
- 4. Wickes Polystyrene Sheet should be loose-laid over the prepared surface; all joints should be tightly butted and taped with 75mm-wide masking tape to prevent the ingress of screed between the boards. Cut the boards with a sharp knife to fit accurately around services and tape as necessary.
- 5. Sand / cement screeds should be at least 65mm thick. During the screeding operations, the surface of the insulation should be protected from impact damage or excessive trafficking by using spreader boards.

### INSULATING A SUSPENDED TIMBER FLOOR

Suspended timber ground floors are a source of considerable heat loss which can be dramatically reduced by installing insulation between the floor joists.

#### Suitable Product

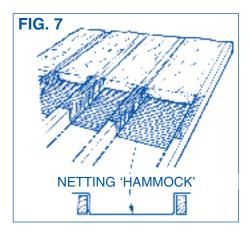
Wickes General Purpose Insulation Slab 50mm (and 100mm in selected stores) or Wickes 170mm Top Layer Loft Roll Insulation.

it is compatible with Wickes Polystyrene



#### Steps to installing General Purpose Slab 50mm/100mm or 170mm Loft Roll between joists in a suspended timber floor

- 1. Clear the room and carefully lift all floorboards.
- 2. Where the insulation is the full depth of the floor joists, staple garden netting to the underside of the first joist and unroll the netting, stapling to the underside of each joist. Alternatively, use the method detailed below to form a cradle or hammock equal to depth of the joists. (FIG. 7)



- 3. Where the joist is deeper than the insulation, mark the depth of the insulation on the side of the joists. Staple the support netting along this line and pull taut to the adjacent joist and staple again. Pull the netting over the joist and staple at the depth of the insulation. Repeat until the whole floor has netting support.
- 4. Roll loft roll out between the joists ensuring there are no air gaps. General Purpose Slabs can be cut to friction fit between the joists. Ensure that slab ends are closely butted together.
- 5. Fix the chipboard floor deck in the usual way using waterproof PVA glue at the joints and allow a minimum 10mm gap at the room perimeter.

**NOTE:** Any water pipes under the joists will be more vulnerable to freezing. It is important to insulate them using Wickes pipe lagging.

### INSULATING WALLS AND FLOORS IN MULTI-DWELLINGS

#### Suitable Product

30mm Acoustic Insulation Slab - high performance acoustic insulation for walls and floors.

- Ideal for insulating walls and floors separating adjoining properties
- Excellent for reducing impact sound in separating floors
- · Good thermal performance
- Can also be used in partition walls and between joists in timber floors

#### R-value:

0.80m2 K/W

#### **Fire Performance:**

Classified as Euroclass A1 to BS EN ISO 13501-1

## Steps to installing 30mm Acoustic Insulation Slab under chipboard

- 1. Before laying slabs, position preservative-treated battens in accordance with BS 1282:1999 around the perimeter of the room, at doorways and access panels and support partitions.
- Permanent heavy items should be supported with battens positioned on the sub-floor and recessed into the insulation.
   Partitions should be built directly off the sub-floor.
- 3. Install 1000 gauge polythene between the insulation and chipboard. The polythene sheet must have 150mm overlaps taped at the joints and should be turned up 100mm at the walls.
- 4. Lay tongue and groove 18mm thick particle board (type P5 or P7), or OSB/3 or OSB/4, with staggered cross-joints in accordance with ENV 12872:2000.
- 5. Allow a minimum gap of 10mm between the walls and chipboard at the room perimeter. Pack the gap with offcuts of Wickes Acoustic Insulation Slab.
- 6. Ensure you leave a 3mm gap between the chipboard and lower edge of the skirting board.

## Steps to installing 30mm Acoustic Insulation Slab between joists in a suspended timber floor

- 1. Friction fit slabs between the joists with the insulation in contact with the ceiling.
- 2. Between the last joist and the wall, cut insulation to size and install in the gap.
- 3. Screw fix the chipboard deck to the timber joists as normal, using waterproof PVA glue at the joints. Allow a minimum gap of 10mm between walls and chipboard at the room perimeter.

## Steps to installing 30mm Acoustic Insulation between joists in a suspended timber ground floor

- 1. Install Wickes galvanized wire netting between the joists or, alternatively, nail 25mm timber battens to the joist sides.
- 2. Friction fit slabs between the joists.
- 3. Follow points 2 and 3 above.

### Steps to installing 30mm Acoustic Insulation Slab under screed / slab

- 1. Place insulation boards onto a damp proof membrane on the sub floor.
- 2. An upstand using offcuts should be placed around the perimeter. The insulation upstand should be the same depth as the screed or slab.
- 3. Install building paper between insulation and screed / slab.
- 4. Use minimum 65mm screed containing wire mesh reinforcement. Wickes galvanised wire netting is ideal.

## Steps to upgrade the acoustic performance of an existing party wall using 30mm Acoustic Insulation Slab

- 1. Construct a timber or steel frame, applying a bead of acoustic sealant to the timber to be fixed to the surrounding structure. Ensure that the new framework is not in contact with existing party wall.
- 2. Ensure the insulation fits tightly against the stud sides, and slightly protrudes into the existing room so that it will fit tightly against the plasterboard sheet.
- 3. Board out and then seal all gaps around the perimeter of the plasterboard with sealant.

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